

## **Stress Less Classrooms:**

### **A Contemplation in How to Stress Less and Learn More**

**Nicole C. Fisher, YRDSB**

#### **Brief Introduction:**

Statistics from the Mental Health Commission of Canada demonstrate an urgency in how we understand our life choices and likewise calls our paradigm thinking to the fore, stating that “1 out of 5 Canadians (6.7 million people) experiences a significant mental health problem in any given year.” The question then arises, what are we to do to bring ourselves back into a regenerative state of resilience and improved learning without leading a compromised life half-lived? When it comes to discussing stress, we have to realize that there is more going on than we may have predicted. The knowledge is available to shift our awareness; however, it is the wisdom to take action and live it each moment that awaits us.

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By the nature of our very cellular design, human beings are wired to gravitate to what is nourishing and to retract from that which is harmful or threatening. It seems so simple, and yet we are witnesses to issues everyday which challenge this primal blueprint. According to cellular biologist, Dr. Bruce Lipton, our cells will move toward a healthy food substance in a petri dish, and move away from a toxin. However, he also indicates that when the circumstances change and there is no food available, the cell will shift into survival mode and find a way to adapt, such that it will use the toxin as food, despite potential side effects to optimum functioning (Lipton, *The New Biology - Where Mind and Matter Meet*, DVD, 2001). This starts to sound a little more familiar, if we use the petri dish as an analogy representing how many aspects of our lives tend to function in society today. Statistics from the Mental Health Commission of Canada demonstrate an urgency in how we understand our life choices and likewise calls our paradigm thinking to the fore, stating that “1 out of 5 Canadians (6.7 million people)

experiences a significant mental health problem in any given year” (Mental health education is important because..., 2012). The question then arises, what are we to do to bring ourselves back into a regenerative state of resilience and improved learning without leading a compromised life half-lived?

Fortunately, thanks to our digital-techno-era, the details of quantum physics are no longer just mysterious theories scooped up by science fiction writers. Energy fields of the body are easily read by PIP photography, blueprints can be viewed with Kirlean photography, and Dynamic Systems Theory is taking the stage as we come to realise that there are multiple-causal factors in our environment and healthcare, and that all systems are in relation to each other. How much is understood about this information depends on our exposure to its details and modalities that apply it, and how well the scientific method can prevail under such a variety of circumstances where isolating factors is difficult. Dr. Martha Herbert of Harvard University specializes in revolutionizing the way Autism Spectrum Disorders are viewed. And, while pinpointing key physical connections to ASD, she is likewise broadening the scope of study to include observations, parental anecdotal comments, and results from a wider range of modalities. “As new genetic and systems biology discoveries pile up, scientists, doctors, and all of us are humbled by how complex most medical disorders are” (Herbert & Weintraub, 2012, p. 210). Organizations are careful in how to present non-scientific information – and really, they have to be – because one size does not fit all, and families have taken on their own exploratory research in order to seek relief and improvements with their child’s issues. What does this say about stress? We are coming to realize that our biology responds to our environment and our perceptions of it. So, not only is this an external-to-the-individual environmental consideration (i.e. what is going on around us as a family, community, culture, country, etc.), but likewise an internal-to-the-individual consideration (i.e. what is going on in our mind, our interpretations of situations, our view on daily events, etc.). This scientific epiphany works with Dynamic Systems Theory in a field called *epigenetics* wherein we discover that while DNA produces certain expressions in the bodymind, DNA does not turn its own switches on and off – our perception of the environment does.

We might also include that within our primal wiring, is that of conscious and subconscious awareness levels. Ironically, the part that is paramount to our lives,

the conscious mind, accounts for approximately 1% of how we live, whereas the subconscious mind and its default settings from in utero and onward from birth, account for 99% of the decisions we make and the views we have. Much of what we struggle with may not be so much about what we know today, but rather the bigger picture within the subconscious that holds what more there is to understand about ourselves and our connection to the world around us. “The subconscious mind, one of the most powerful information processors known, specifically observes both the surrounding world and the body’s internal awareness, reads the environmental cues and immediately engages previously acquired (learned) behaviours – all without the help, supervision or even awareness of the conscious mind” (Lipton, *The Biology of Belief*, 2005, p. 167). Hence, when it comes to discussing stress, we have to realize that there is more going on than we may have predicted, and there are different ways that issues can be addressed.

In our classrooms, we try to create a nurturing and supportive environment, and yet despite our efforts there are times that we fall short. In these quickly changing times, we have likewise seen changes in our classroom clientele and in approaches to learning. It can seem a bit messy as we navigate between the lingering prussianesque education model (i.e. Prussian-based schooling hierarchy rooted in standardized conformity) and the increasing individualized approaches today. We have a system that would desperately like to focus on the learner, meeting them where they are at, and differentiating with content and output, and yet we are bound by data driven mandates of consistency, the expectation of results in number form, and comparable averages across the board. As such, we have certain quantifiable givens in schools today, an unsurprising variation of tests, assignments, and homework with varying degrees of pressure and judgement. We rationalize that this kind of experience is preparatory for the real-world-experience and necessary for survival, and in many ways the world is like this. But survival? Is this what we are after? Well, it’s not like we want to set up today’s children to fail, but are we helping them to live happy lives and to look after themselves and the planet? How does this match with earlier data on the wellness of our population? According to Lipton, any academic test is interpreted by the reptilian brain as a threat which produces a cortisol reaction, and while it is suitable for survival imprinting, it denies access to the pre-frontal cortex of the brain where higher level thinking and dynamic thinking occur (Lipton, *The New Biology* -

Where Mind and Matter Meet, DVD, 2001). What happens when stress is repetitive over time? Eventually the bodymind protects itself by numbing its sensory input, and according to Dr. Gabor Maté, even ADD/ADHD can be the bodymind's attempt to deflect/diminutize its focus from prolonged or intense stressors (directly or indirectly to the individual). "The original purpose of dissociation is to separate conscious awareness from some emotional pain we are experiencing, to dis-associate one from the other. We may think of dissociation as a psychological anaesthetic" (Maté, 1999, p. 118). This is not to say that we should not come across challenges and learn to work through them. Paradoxically, we *do* learn through stress or conflict (physical, mental, emotional, financial, relational, spiritual); however, is it necessary to feed it?

When it comes to pushing through stress, workaholics receive praise for their dedication, and marathon runners hit *the wall* and train themselves to still finish a race. In either case, the bodymind is in a state of harmful compromise, and the reason people can *push on* is because their system has disengaged and is using reserve energy instead. Depending on one's healthy stress threshold, certain tasks or events that overburden or cause sensory overload (e.g. flickering/fluorescent light) will trigger this disengagement which Dr. John Veltheim refers to as *switching*. This is a natural reaction designed to be helpful – even life-saving, and the signs are meant to highlight the need to slow down, rest, eat, and take care of one's self to avoid potential illness. If ignored, the resulting low glucose level signals a mild state of shock which creates difficulty in focusing, and an inability to think straight where words are mixed up, yes/no answers are confused, careless mistakes are made, and one gravitates to unhealthy choices. "The average person under heavy or prolonged stress, however, lives in this chronic state of coping by going into mild shock, coming in and out of *switching* almost all the time, and thus causing the immune system to be compromised" (Veltheim, 2013, p. 70). Non-invasive bodymind rebalancing techniques can be used to improve one's stress threshold and resilience; however, it is important to pay attention to how we reshape our relationship to stress. The knowledge is available to shift our awareness; however, it is the wisdom to take action and live it each moment that awaits us.

The good news is that it's not all up to our cerebral brain to figure out.  
Introducing: the Heart – which not only started beating before the brain was

formed, but it too has neuro-wiring and is coming on the scene to demonstrate that its power of influence is much greater than brain-power – it's like the next upgrade in our understanding. According to the Institute of HeartMath, “using the pattern of the heart's rhythmic activity as the primary physiological marker, six different modes of psychophysiological function are identified, distinguished by their physiological, mental, and emotional correlates” (McCraty, Atkinson, Tomasino, & Bradley, 2012). The heart features holistic wiring and corresponds with the brain to make more *heart-felt* decisions. So, take heart as we begin to honour and be nourished by a deeper knowing that recharges our energy rather than depleting our reserves.

How? With *homework*, though not as we traditionally know it, but rather as *home work*...a practice dedicated to taking care of one's self and family time through healthy eating and sleep patterns, play and re-creation. How many people know that according to the Traditional Chinese Medicine concept of meridians that falling asleep before midnight helps the gall bladder and liver meridians to process and file events of the day, and is a chance for the parasympathetic nervous system to heal what is in need? Also, healthy eating means not only having choices that work for our body's metabolism, but also eating in an environment that we would like to *take in* and *digest*, and being able to eat when our body needs to refuel. How many people know that neurons run on water and that much studying and brainwork uses it up more quickly? Hydration and the ability of our cells to absorb water and to release toxins is equally important. “The problem of poor hydration has been amplified in modern Western societies where there is a trend for children to drink less pure water. Instead they drink caffeinated soft drinks that act as diuretics and cause even greater dehydration. Hence, they have poor absorption of nutrients and a tendency to have malfunctions of the nervous system due to the diminished nerve conduction. This contributes to hyperactivity, learning disorders, and weakened immune systems” (Veltheim, 2013, p. 72). Remember when play wasn't a scheduled, prescribed activity – it was just play? We were born to move, and when combined with play and laughter, it releases endorphins that naturally enhance our resilience. Furthermore, according to clinical psychologist, Anat Baniel, the “moving body is at the heart of the brain's capacity for creating new neuroconnections and pathways” which is key to supporting new learning (Baniel, 2012, p. 30).

How do we support a Stress Less Classroom? We take what we know, and we *honour* it by paying attention to the cortisol levels in our classrooms; by giving students input into their learning; by offering a play-zone for academic ideas and coaching; by balancing the need for extra homework with the time needed for the bodymind's ability to restore itself. By supporting the requirements for the pre-frontal cortex to function optimally, students have a better chance to engage in their learning more voluntarily. When we can give a breather from stressors and demonstrate a more proactive awareness, we provide a space for new perspectives and a reshaping of how stress is understood. When we can model stress responses rather than amygdalic reactions, the *neuroplasticity* of the brain can rewire itself for improved resilience to life's challenges. When we can foster an environment for citizens who value taking care of themselves, we provide a better opportunity for improved achievement and quality of life, a more intricate awareness of our environment, and more heart to look after it as well. Stress Less and Learn More. It's about educating for wellness.

## Works Cited

- Baniel, A. (2012). *Kids Beyond Limits*. New York: Perigee.
- Herbert, M., & Weintraub, K. (2012). *The Autism Revolution - Whole-Body Strategies for making life all it can be*. New York: Ballentine Books, Harvard Health Publications.
- Lipton, B. (Director). (2001). *The New Biology - Where Mind and Matter Meet*, DVD [Motion Picture].
- Lipton, B. (2005). *The Biology of Belief*. Santa Rosa: Mountain of Love/Elite Books.
- Maté, G. (1999). *Scattered Minds - A New Look at the Origins and Healing of Attention Deficit Disorder*. Toronto: Vintage Canada.
- McCraty, R., Atkinson, M., Tomasino, D., & Bradley, R. T. (2012, June 12). *The Coherent Heart: Heart-Brain Interactions, Psychophysiological Coherence, and the Emergence of System-Wide Order*. Retrieved from Institute of HeartMath: <http://store.heartmath.org/scientific-monographs/coherent-heart>
- Mental health education is important because...* (2012). Retrieved from Understanding Minds: <http://www.understandingminds.ca/about>
- Veltheim, J. (2013). *The Science and Philosophy of BodyTalk - Healthcare Designed by Your Body*. Florida: International BodyTalk Association.